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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,348	10/07/2003	Liang-Ying Huang	HUAN3219/EM	3853
34283 7590 06/29/2007 QUINTERO LAW OFFICE, PC 2210 MAIN STREET, SUITE 200 SANTA MONICA, CA 90405			EXAMINER LEE, EDMUND H	
			ART UNIT 1732	PAPER NUMBER
			MAIL DATE 06/29/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/679,348

Applicant(s)

HUANG ET AL.

Examiner

EDMUND H. LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/10/07 has been entered.

2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The step of jetting a black photo-resist liquid (cl 1, lns 8-9) is indefinite because it is unclear whether or not the step is related to the step of jetting a plurality of primary colors. If the steps are related then it should be clearly and positively recited as such.

Correction is required.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins (USPN 5399390) in view of Suzuki (USPN 6801274), Moshrefzadeh et al (USPN 6077560) and Nakahara et al (US 2004/0004691). In regard to claim 1, Atkins teaches the basic claimed process including a method of making a color filter (col 2, Ins 24-30 and 35-41; col 3, Ins 30-35, 40-55, and 61-68; col 4, Ins 13-25 and 49-56; and figs 2-4); providing a substrate with an extrusion method, the substrate having a plurality of grooves (col 2, Ins 24-30 and 35-41; col 3, Ins 30-35, 40-55, and 61-68; col 4, Ins 13-25 and 49-56; and figs 2-4); filling the primary colors of red, green, and blue into the groove by jetting (col 2, Ins 24-30 and 35-41; col 3, Ins 30-35, 40-55, and 61-68; col 4, Ins 13-25 and 49-56; and figs 2-4); and covering a plane passivation layer on the top surface of the substrate (col 2, Ins 24-30 and 35-41; col 3, Ins 30-35, 40-55, and 61-68; col 4, Ins 13-25 and 49-56; and figs 2-4). Atkins, however, does not teach using a substrate having a groove comprising an intermediary step portion between a top and bottom thereof; jetting black photo-resist liquids by an inkjet printing method. Suzuki teaches a color filter having a substrate with grooves therein, wherein the grooves having an intermediary step portion (figs 1-7). Moshrefzadeh et al teach a method of molding a color filter for an LCD; and depositing black photo-resists onto a plastic substrate, which has multiple grooves therein (col 9, Ins 12-25; fig 2g). Nakahara teach a method of molding a color filter for an LCD; and inkjet printing a resist onto a substrate (paragraph 0060). Nakahara also teaches that inkjet printing and depositing are substitutable alternatives for forming a resist (paragraph 0060). Suzuki, Atkins, Moshrefzadeh et al, and Nakahara are combinable because they are analogous with respect to liquid crystal

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displays. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to jet by inkjet printing a black photo-resist as taught by Moshrefzadeh et al and Nakahara in the process of Atkins in order to produce a color filter having high quality. In regard to claims 2-3, such are taught by Atkins (col 2, Ins 24-30 and 35-41; col 3, Ins 30-35, 40-55, and 61-68; col 4, Ins 13-25 and 49-56; and figs 2-4). In regard to claims 4-5, such are taught by the above combination of Atkins, Moshrefzadeh et al, and Nakahara.

5. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US patents teach the state of the art: 6870585, 6383694, 5712065, 5995191, and 2004/0096595.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571.272.1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE  
Primary Examiner  
Art Unit 1732

EHL

  
6/27/08